



PATENT
Attorney Docket No. 210013

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Tadatomo et al.

Application No. 09/787,502

Art Unit: 2815

Examiner: E. Ortiz

Filed: March 16, 2001

For: SEMICONDUCTOR LIGHT
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AMENDMENTS TO CLAIMS MADE IN RESPONSE
TO OFFICE ACTION DATED JULY 3, 2002

*(Deletions to the claims are indicated by cross-out text,
while additions are indicated by underlined text)*

2. (Twice Amended) A semiconductor light receiving element comprising a light receiving layer comprising a GaN group semiconductor and an electrode formed on one surface of the light receiving layer as a light receiving surface in such a manner that the light can enter the light receiving layer, wherein the light receiving element is a Schottky barrier type light receiving element in which light enters a depletion layer formed under the electrode, which extends to cover a small area around the electrode from the side the electrode is formed, said light receiving layer is a first conductivity type layer, said electrode formed on said light receiving surface comprises at least a Schottky electrode, and a total of boundary lines between areas of the light receiving surface covered with the Schottky electrode and exposed areas is longer than the length of the outer periphery of the light receiving surface.

6. (Amended) The light receiving element of claim 2, wherein the light receiving layer is an uppermost layer of a laminate comprising one or more layers comprising a first conductivity type GaN group semiconductor formed on a crystal substrate, ~~which~~ wherein the light receiving element comprising comprises an ohmic electrode formed on a layer other than the light receiving layer.

8. (Twice Amended) A semiconductor light receiving element comprising a light receiving layer comprising a GaN group semiconductor and an electrode formed on one surface of the light receiving layer as a light receiving surface in such a manner that the light

can enter the light receiving layer, wherein the light receiving element is a photoconductive type light receiving element, the light receiving layer is a first conductivity type i layer, and the electrode formed on the light receiving surface is an ohmic electrode of one polarity, ~~which~~ wherein the light receiving element comprising comprises an ohmic electrode of the other polarity formed on the other surface of the light receiving layer directly or via a first conductivity type and low resistance GaN group semiconductor layer.